

# High Brightness Diffuser

## ABSTRACT

5 The present invention is to provide a solution for fabricating a light diffusing sheet- like device capable of emitting light with superior brightness, that is a high brightness diffuser. The high brightness diffuser mainly comprises at least two light diffusing pieces with ridge-shape structure arranged thereon, which can be either convex or concave. The convex ridge-shape structure is consisted of a plurality of large convex  
10 ridges and a plurality of small convex ridges, which are associated with a ridgeline existing in between two adjacent ridges where the large ridge and small ridge are interlace-arranged, and the ridges along with the associated ridgelines can be longitudinally extended to the same direction. Likewise, The concave ridge-shape structure is constituted the same way as the convex  
15 ridge-shape structure is, but is consisted of concave ridges. The high brightness diffuser is fabricated by stacking up the two light diffusing pieces and enabling an included angle to be formed between the two ridge-extending directions of the two light diffusing pieces. Through the embodiment of the present invention, a high brightness diffuser with  
20 reduced thickness capable of emitting light of superior brightness and of wide-angle uniformity can be fabricated, and thus can be applied in a rear projection module.